



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/552,631

10/07/2005

Ragnar Tryggvason

05049.0004

8991

22852

7590

03/25/2009

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
LLP

901 NEW YORK AVENUE, NW  
WASHINGTON, DC 20001-4413

EXAMINER

KURTZ, BENJAMIN M

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

03/25/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/552,631	<b>Applicant(s)</b> TRYGGVASON ET AL.	
	<b>Examiner</b> BENJAMIN KURTZ	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 22,24,25 and 30-54 is/are pending in the application.
- 4a) Of the above claim(s) 30-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22,24,25 and 36-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

Claims 22, 24, 25 and 30-54 are pending, claims 30-35 are withdrawn and claims 1-21, 23 and 26-29 are cancelled.

### ***Claim Rejections - 35 USC § 102 and 103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

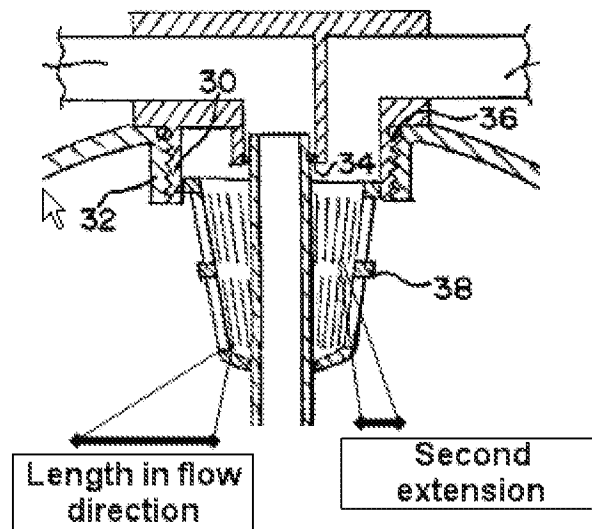
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 22, 24, 25, 36, 37, 39, 45-49 and 52 are rejected under 35 U.S.C. 102(e) as being anticipated by Barlow US 6 776 907.**

Claims 1-3, 6, 12-16, 19 and 22-25 were previously rejected over Barlow '907 under 35 USC 102(b). The examiner thanks the applicant for pointing out the typographical error that Barlow was mistakenly applied as a 102(b) reference. Barlow is not eligible as prior art under 102(b) but is eligible under 102(e) with a filing date of Nov. 20, 2001.

Claim 22, Barlow teaches a cartridge (10) including: an inner space, an inlet (28) to permit introduction of fluid into the inner space, an outlet (18) to permit discharge of fluid from the inner space, a device (38) comprising a hollow body defined by a wall enclosing a cavity of the body, the body having a first end and a second end and being provided with at least one slit shaped opening (40) extending through the wall, the first end being mounted to the cartridge and at the inlet such that the body extends into the inner space and the second end is located in the inner space of the cartridge, the first end being open, the slit shaped opening has a first extension and a second extension being substantially perpendicular to a flow direction and to the first extension wherein the second extension is significantly shorter than the first extension and significantly shorter than a length of the at least one slit shaped opening in the flow direction (fig. 3, 4). The recitation of the cartridge being for preparing a liquid solution for a medical procedure and arranged to contain a particulate material is a recitation of intended use and does not further structurally limit the apparatus.



Claims 24 and 25, Barlow further teaches the cartridge includes a filter (22) arranged at the outlet permitting fluid flow through the filter in a filter direction (fig. 5); and the filter includes at least one slit shaped opening (20) which has a first extension and a second extension being substantially perpendicular to the filter direction and to the first extension, wherein the second extension is significantly shorter than the first extension (fig. 5).

Claims 36, 37, 39, 45-49 and 52, Barlow further teaches the hollow body has a center axis and an elongated, tubular shape along the center axis (fig. 4); the hollow body is tapering along the center axis toward the second end (fig. 4); the first extension is substantially perpendicular to the flow direction (fig. 4); the at least one slit shaped opening is a plurality of slit shaped openings, which extend through the wall (fig. 4); the plurality of slit shaped openings are distributed around the wall (fig. 4); the hollow body has a wall portion at least in the proximity of the second end, and wherein at least one slit shaped openings extends through the wall portion (fig. 4); the wall portion has a tip

Art Unit: 1797

like shape (fig. 3, 4); the wall portion is substantially conical (fig. 3, 4); and the flow direction forms an angle to the center axis (fig. 3).

**2. Claim 38 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Barlow '907.**

Barlow teaches the device of claim 22 and further teaches the hollow body at the first end has engaging means configured to connect the device to the cartridge (fig. 3). The upper lip of Barlow performs the same function of securing the device to a cartridge in substantially the same way with substantially the same results as the flanges disclosed herein.

**3. Claims 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow '907.**

Barlow teaches the cartridge of claim 22 but does not teach the recited dimensions of the second extension. The only difference between the prior art and the claims is a recitations of relative dimensions of the second extension. [W]here the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device is not patentably distinct from the prior art device, *Gardner v. TEC Systems, Inc.*, 220 USPQ 777 (1984).

**4. Claims 50 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow '907 and Weber US 3 155 612.**

Barlow teaches the cartridge of claim 47 as detailed above but does not teach the wall portion being substantially planar. Weber teaches a hollow body having a wall portion (11) in the proximity of a second end with at least one slit shaped opening extending through the wall portion wherein the wall portion is substantially planar and a center axis extends substantially in parallel with a normal direction of the planar wall portion (fig.1-4). The recitation of configuration of the wall portion is a recitation of a change in shape of the wall portion. The configuration of the apparatus is a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration is significant, *In re Dailey*, 149 USPQ 47 (1966). Furthermore, the claimed shape of the wall portion is known in the prior art and would have been obvious because the technique for improving a particular class of devices was part of the ordinary capabilities of a person of ordinary skill in the art, in view of the teaching of the technique for improvement in other situations, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

**5. Claims 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow '907 and Hensley US 4 787 987.**

Barlow teaches the cartridge of claim 47 as detailed above but does not teach the wall portion being substantially planar. Hensley teaches a hollow body having a wall portion (40) in the proximity of a second end with at least one slit shaped opening extending through the wall portion wherein the wall portion is substantially planar and wherein a normal direction of the wall portion forms an angle of inclination to the center axis (fig. 1, 3). The recitation of configuration of the wall portion is a recitation of a change in shape of the wall portion. The configuration of the apparatus is a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration is significant, *In re Dailey*, 149 USPQ 47 (1966). Furthermore, the claimed shape of the wall portion is known in the prior art and would have been obvious because the technique for improving a particular class of devices was part of the ordinary capabilities of a person of ordinary skill in the art, in view of the teaching of the technique for improvement in other situations, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

**6. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow '907, Correge et al. US 4 421 646, Weis et al. US 3 730 348 and Marks US 3 317 044.**

Barlow teaches the cartridge of claim 22 where the slit shaped opening of the filter element has an upstream and downstream end but does not teach the second extension increasing from the upstream end to the downstream end. Changing the



Art Unit: 1797

cross section of the slit over the length is only a change in the shape of the slit and is very well known in the art as shown in Correge, Weis and Marks. The configuration of the apparatus is a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration is significant, *In re Dailey*, 149 USPQ 47 (1966). Also, all the claimed elements, i.e. the shape of the slit, were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

### ***Response to Arguments***

7. Applicant's arguments filed 2/9/09 have been fully considered but they are not persuasive.

Barlow teaches each and every element of claim 22 as detailed above.

Regarding applicant's arguments regarding the inlet and outlet of the cartridge, these limitations are process limitations of how fluid flows through the apparatus. Structurally there is no difference between the device as claimed and the prior art to Barlow.

Furthermore, the device of Barlow would function if the inlet and outlet were switched.

### ***Conclusion***

Art Unit: 1797

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN KURTZ whose telephone number is (571)272-8211. The examiner can normally be reached on Monday through Friday 8:00am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1797

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Benjamin Kurtz  
Examiner  
Art Unit 1797

/B. K./  
Examiner, Art Unit 1797

/Krishnan S Menon/  
Primary Examiner, Art Unit 1797